WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Wednesday, June 07, 2006

Hide?	Set Name	Query	Hit Count
	DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=ADJ		
☐	L5	US-20060037108-A1.did.	1
☐	L4	US-20060037108-A1.did.	1
☐	L3	(farnesyl transferase or farnesyltransferase) and corn	324
☐	L2	(farnesyl transferase or farnesyltransferase) same corn	4
	DB=USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ		
☐	L1	(farnesyl transferase or farnesyltransferase) same corn	2

END OF SEARCH HISTORY

Hit List

Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20060037108 A1

L1: Entry 1 of 2 File: DWPI Feb 16, 2006

DERWENT-ACC-NO: 2006-163990
DERWENT-WEEK: 200617

TITLE: Producing drought-tolerant plants comprises providing a nucleic acid construct comprising a nucleic acid sequence encoding a beta subunit of a farnesyl transferase polypeptide

INVENTOR: BONETTA, D; CUTLER, S ; GHASSEMIAN, M ; MCCOURT, P

PRIORITY-DATA: 2005US-0228875 (September 16, 2005), 1997US-054474P (August 1, 1997), 1998WO-US15664 (July 29, 1998), 1998US-0124867 (July 30, 1998), 1998US-0191687 (November 13, 1998), 2001US-294766P (May 31, 2001), 2001US-309396P (August 1, 2001), 2001US-348909P (October 22, 2001), 2001US-337084P (December 4, 2001), 2002US-0160764 (May 31, 2002), 2002US-0210760 (August 1, 2002), 2002US-0229541 (August 27, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20060037108 A1	February 16, 2006		461	A01H001/00

INT-CL (IPC): A01 H 1/00; A01 H 5/00; C07 H 21/00; C07 H 21/04; C12 N 15/82

ABSTRACTED-PUB-NO: US20060037108A
BASIC-ABSTRACT:

NOVELTY - Producing a drought-tolerant plant, the plant selected from Brassica, corn, soybean, or Arabidopsis, comprises providing a nucleic acid construct comprising a promoter operably-linked to an antisense nucleic acid of an nucleic acid sequence encoding a beta subunit of a farnesyl transferase polypeptide or its fragment.

DETAILED DESCRIPTION - Producing a drought-tolerant plant, the plant selected from Brassica, corn, soybean, or Arabidopsis, comprises:

(a) providing a nucleic acid construct comprising a promoter operably-linked to an antisense nucleic acid of an nucleic acid sequence encoding a beta subunit of a farnesyl transferase polypeptide or its fragment;

(b) inserting the nucleic acid construct into a vector;

(c) transforming a plant, tissue culture, or a plant cell with the vector; and

(d) growing the plant or regenerating a plant from the tissue culture or plant cell;

Where a drought-tolerant plant is produced.

INDEPENDENT CLAIMS are also included for a drought tolerant transgenic plant produced by the method above, and a transgenic seed produced by the transgenic plant, where the transgenic seed produces a drought tolerant plant.

USE - The method is useful for producing a drought-tolerant plant, the plant selected from Brassica, corn, soybean, or Arabidopsis.

☐ 2. Document ID: US 20040248159 A1, WO 200014207 A2, AU 9958121 A

L1: Entry 2 of 2 File: DWPI Dec 9, 2004

DERWENT-ACC-NO: 2000-256964
DERWENT-WEEK: 200481

TITLE: New isolated polynucleotide encoding farnesyltransferase polypeptide is useful for producing transgenic plants with an altered level of farnesyltransferase

INVENTOR: CAHOON, R E; HELENTJARIS, T G ; MIAO, G ; POWELL, W

PRIORITY-DATA: 1998US-099521P (September 8, 1998), 2001US-0786675 (March 7, 2001), 2004US-0773529 (February 6, 2004)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20040248159 A1	December 9, 2004		000	C12Q001/68
WO 200014207 A2	March 16, 2000	E	051	C12N009/10
AU 9958121 A	March 27, 2000		000	C12N009/10

INT-CL (IPC): C07 H 21/04; C12 N 5/04; C12 N 9/10; C12 N 15/29; C12 N 15/54; C12 N 15/70; C12 N 15/80; C12 Q 1/68

ABSTRACTED-PUB-NO: WO 200014207A
BASIC-ABSTRACT:

NOVELTY - An isolated polynucleotide (I) comprising a nucleotide sequence encoding a farnesyltransferase polypeptide of at least 300 amino acids, is new.

DETAILED DESCRIPTION - An isolated polynucleotide (I) comprises a nucleotide sequence with at least 80% identity based on the Clustal method of alignment when compared to defined farnesyltransferase polypeptide sequences of 326 or 452 amino acids (aa) from corn, of 339 or 313 aa from rice, of 429, 141, 346 or 358 aa from a soybean, or of 309 of wheat (all sequences are given in the specification).

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated polynucleotide (II) comprising the complement of (I);

(2) a chimeric gene (III) comprising (I) or (II) operably linked to suitable regulatory sequences;

(3) an isolated host cell comprising (I) or (III);

(4) a farnesyltransferase polypeptide of at least 300 amino acids comprising at least 80% homology based on the Clustal method of alignment compared to a farnesyltransferase polypeptide from corn, rice, soybean or wheat; and

(5) a method of selecting an isolated polynucleotide that effects the level of expression of a farnesyltransferase polypeptide in a plant cell comprising:

(a) introducing (I) into a plant cell;

(b) measuring the level of farnesyltransferase polypeptide in the plant cell containing (I); and

(c) comparing this with the level of farnesyltransferase polypeptide in a plant cell that does not contain (I).

USE - Plants with a decreased farnesyltransferase activity may have enhanced tolerance to drought stress and so (I) may be used in plant cells to control cell growth and produce plants with improved water stress tolerance. Nucleic acids encoding all or a part of farnesyltransferase proteins can be used in studies to understand cell growth in plants and provide genetic tools to control cell growth and improve tolerance to drought in mature plants.

(I) may be used to create transgenic plants which comprise farnesyltransferase polypeptides at a higher or lower level than normal or in cell types or developmental stages in which they are not normally found. The chimeric genes can be used to accomplish over expression of farnesyltransferase or under expression when (I) is in an antisense orientation.

Terms	Documents
(farnesyl transferase or farnesyltransferase) same corn	2

Hit List

First Hit | Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 20060037108 A1

L2: Entry 1 of 4 File: PGPB Feb 16, 2006

PGPUB-DOCUMENT-NUMBER: 20060037108
PGPUB-FILING-TYPE:
DOCUMENT-IDENTIFIER: US 20060037108 A1

TITLE: Stress tolerance and delayed senescence in plants

PUBLICATION-DATE: February 16, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
McCourt; Peter	Toronto	CA	CA
Ghassemian; Majid	Carlsbad	CA	US
Cutler; Sean	Toronto		CA
Bonetta; Dario	Palo Alto		US

US-CL-CURRENT: 800/289; 536/23.2, 800/306, 800/312, 800/320.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D

☐ 2. Document ID: US 20050172361 A1

L2: Entry 2 of 4 File: PGPB Aug 4, 2005

PGPUB-DOCUMENT-NUMBER: 20050172361
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050172361 A1

TITLE: Regulation of gene expression in plant cells

PUBLICATION-DATE: August 4, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Huang, Yafan	Kingston		CA

US-CL-CURRENT: 800/286; 435/419, 435/468

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D

☐ 3. Document ID: US 20040248159 A1

L2: Entry 3 of 4 File: PGPB Dec 9, 2004

PGPUB-DOCUMENT-NUMBER: 20040248159
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040248159 A1

TITLE: Plant farnesyltransferases

PUBLICATION-DATE: December 9, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Cahoon, Rebecca E.	Webster Groves	MO	US
Helentjaris, Timothy George	Ankeny	IA	US
Miao, Guo-Hua	Johnston	IA	US

US-CL-CURRENT: 435/6; 435/193, 435/320.1, 435/419, 435/69.1, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 4. Document ID: US 20030167535 A1

L2: Entry 4 of 4 File: PGPB Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167535
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030167535 A1

TITLE: Compositions and methods of increasing stress tolerance in plants

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Huang, Yafan	Kingston		CA
Chalifoux, Maryse	Kingston		CA
Wang, Yang	Kingston		CA
Kuzma, Monika Maria	Glenburnie		CA
Gilley, Angela Patricia	Inverary		CA

US-CL-CURRENT: 800/289; 435/193

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
(farnesyl transferase or farnesyltransferase) same corn	4

Display Format: - Change Format

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FILE 'HOME' ENTERED AT 08:36:34 ON 07 JUN 2006
=> file .nash
=> s corn and (farnesyltransferase or farnesyl transferase)
L1            0 FILE MEDLINE
L2            6 FILE CAPLUS
L3            2 FILE SCISEARCH
L4            0 FILE LIFESCI
L5            0 FILE BIOSIS
L6            3 FILE EMBASE

TOTAL FOR ALL FILES
L7           11 CORN AND (FARNESYLTRANSFERASE OR FARNESYL TRANSFERASE)

=> s l7 not 2000-2006/py
TOTAL FOR ALL FILES
L14           6 L7 NOT 2000-2006/PY

=> dup rem l14
PROCESSING COMPLETED FOR L14
L15           5 DUP REM L14 (1 DUPLICATE REMOVED)

=> d ibib abs 1-5

L15  ANSWER 1 OF 5  EMBASE  COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:   1999145808  EMBASE  Full-text
TITLE:              Carcinogen and dietary lipid regulate ras expression and
                    localization in rat colon without affecting farnesylation
                    kinetics.
AUTHOR:             Davidson L.A.; Lupton J.R.; Jiang Y.-H.; Chapkin R.S.
CORPORATE SOURCE:   R.S. Chapkin, Faculty of Nutrition, Molecular and Cell
                    Biology Group, Texas A and M University, College Station,
                    TX 77843-2471, United States. chapkin@acs.tamu.edu
SOURCE:             Carcinogenesis, (1999) Vol. 20, No. 5, pp. 785-791. .
                    Refs: 57
                    ISSN: 0143-3334  CODEN: CRNGDP
COUNTRY:            United Kingdom
DOCUMENT TYPE:      Journal; Article
FILE SEGMENT:       016     Cancer
                    029     Clinical Biochemistry
                    048     Gastroenterology
                    052     Toxicology
LANGUAGE:           English
SUMMARY LANGUAGE:   English
ENTRY DATE:         Entered STN: 12 May 1999
                    Last Updated on STN: 12 May 1999
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AB Epidemiological and experimental data suggest that dietary fiber and fat are major determinants of colorectal cancer. However, the mechanisms by which these dietary constituents alter the incidence of colon cancer have not been elucidated. Evidence indicates that dominant gain-of-function mutations short-circuit protooncogenes and contribute to the pathogenesis of cancer. Therefore, we began to dissect the mechanisms whereby dietary fat and fiber, fed during the initiation, promotion and progression stages of colon tumorigenesis, regulate ras p21 localization, expression and mutation frequency. Male Sprague-Dawley rats (140) were provided with corn oil or fish oil and pectin or cellulose plus or minus the carcinogen azoxymethane (AOM) in a 2 x 2 x 2 factorial design and killed after 34 weeks. We have previously shown adenocarcinoma incidence in these animals to be 70.3% (52/74) for corn oil + AOM and 56.1% (37/66) for fish oil + AOM ($P < 0.05$). Total ras expression as well as ras membrane:cytosol ratio was 4- to 6-fold higher in colon tumors than in mucosa from AOM- or saline-injected rats. Expression of ras in the mucosal membrane fraction was 13% higher for animals fed corn oil compared with fish oil feeding ($P < 0.05$), which is noteworthy since ras must be localized at the plasma membrane to function. The elevated ras membrane:cytosol ratio in tumors was not due to increased farnesyl protein transferase activity or prenylation state, as nearly all detectable ras was in the prenylated form. Phosphorylated p42 and p44 mitogen activated protein kinase (ERK) expression was two-fold higher in tumor extracts compared with uninvolved mucosa from AOM- and saline-injected rats ($P < 0.05$). The frequency of K-ras mutations was not significantly different between the various groups, but there was a trend toward a greater incidence of mutations in tumors from corn oil fed rats (85%) compared with fish oil fed rats (58%). Our results indicate that the carcinogen-induced

changes in ras expression and membrane localization are associated with the in vivo activation of the ERK pathway. In addition, suppression of tumor development by dietary n-3 polyunsaturated fatty acids may be partly due to a combined effect on colonic ras expression, membrane localization, and mutation frequency.

L15 ANSWER 2 OF 5 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 1

ACCESSION NUMBER: 1998:476580 SCISEARCH Full-text
THE GENUINE ARTICLE: ZV977
TITLE: Dietary fish oil inhibits the expression of farnesyl protein transferase and colon tumor development in rodents
AUTHOR: Singh J; Hamid R; Reddy B S (Reprint)
CORPORATE SOURCE: Amer Hlth Fdn, Div Nutr Carcinogenesis, 1 Dana Rd, Valhalla, NY 10595 USA (Reprint); Amer Hlth Fdn, Div Nutr Carcinogenesis, Valhalla, NY 10595 USA
COUNTRY OF AUTHOR: USA
SOURCE: CARCINOGENESIS, (JUN 1998) Vol. 19, No. 6, pp. 985-989.
ISSN: 0143-3334.
PUBLISHER: OXFORD UNIV PRESS, GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 32
ENTRY DATE: Entered STN: 1998
Last Updated on STN: 1998

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Although epidemiological and experimental studies indicate a strong relationship between different dietary fats and risk of colon cancer, the modulating effects of these nutritional factors at the molecular level are not fully elucidated. Activated ras genes have been implicated in the etiology of many human malignancies, including colon cancer, It is well established that the transforming ability of ras-p21 depends on its correct localization in plasma membrane. We have previously demonstrated that ingestion of a relatively higher amount of dietary fish oil leads to reduced plasma membrane levels of ras-p21 with concomitant increase in its cytoplasmic contents during the promotion and progression phases of chemically-induced colon tumorigenesis, In this follow-up experiment, we have found that intake of a high amount of corn oil, one of the most widely used fats in the American diet, enhances the expression of farnesyl protein transferase (FPTase), This enzyme catalyses farnesylation of ms precursors in a critical step during post-translational modification of ras oncoproteins, thereby enabling their anchorage to plasma membrane, In contrast, consumption of high amounts of fish oil, which is rich in omega-3 polyunsaturated fatty acids, reduces the levels of FPTase expression, thus inhibiting post-translational processing of ras precursors resulting in decreased ras function both in colonic mucosa as well as in colon tumors, These results correlate with increased incidence and multiplicity of grossly visibly colon tumors in carcinogen-treated animals fed a high corn oil diet versus decreased incidence and multiplicity of colon tumors in their counterparts fed the high fish oil diet, This dietary inhibition of FPTase may have a practical chemopreventive potential.

L15 ANSWER 3 OF 5 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1997:71444 SCISEARCH Full-text
THE GENUINE ARTICLE: WC721
TITLE: Dietary fat and colon cancer: Modulating effect of types and amount of dietary fat on ras-p21 function during promotion and progression stages of colon cancer
AUTHOR: Singh J (Reprint); Hamid R; Reddy B S
CORPORATE SOURCE: AMER HLTH FDN, DIV NUTR CARCINOGENESIS, VALHALLA, NY 10595
COUNTRY OF AUTHOR: USA
SOURCE: CANCER RESEARCH, (15 JAN 1997) Vol. 57, No. 2, pp. 253-258
ISSN: 0008-5472.
PUBLISHER: AMER ASSOC CANCER RESEARCH, PUBLIC LEDGER BLDG, SUITE 816, 150 S. INDEPENDENCE MALL W., PHILADELPHIA, PA 19106.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; CLIN
LANGUAGE: English
REFERENCE COUNT: 52

ENTRY DATE: Entered STN: 1997
Last Updated on STN: 1997
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Although epidemiological and experimental studies have indicated a strong relationship between types and amount of dietary fat and colon tumorigenesis, the modulating effects of these nutritional factors at the molecular Level have not been fully elucidated, Transforming proteins encoded by activated ras genes have been implicated in the etiology of many human malignancies, including colon cancer, It is now well established that the transforming ability of ras-p21 critically depends on its correct localization in plasma membrane, The posttranslational processing of the cytosolic precursor (pro-ras), as it is synthesized in the cytoplasm, and its proper anchorage to the cytoplasmic face of plasma membrane are determined by an important intermediate metabolite of dietary fat and an enzyme system that includes farnesyl protein transferase, To provide an understanding of the molecular basis of the relationship between the types and amount of dietary fat and the transforming function of ras, especially during the stages of promotion and progression of colon tumor development, we investigated the effect of various types and amount of dietary fat on the expression of ras-p21 during azoxymethane (AOM)-induced colon carcinogenesis, Male F344 rats were fed the semipurified American Institute of Nutrition-76A diet containing low-fat corn oil and were given s.c. injections of AOM dissolved in normal saline at a dose rate of 15 mg/kg body weight, once weekly, for 2 weeks. Control animals received s.c. injections of equal volumes of normal saline, Beginning 1 day after the second AOM or saline injection, groups of animals intended for the treatment with different types of high-fat dietary regimens were fed the semipurified American Institute of Nutrition-76A diets containing high levels of high-fat corn oil (HFCO) rich in omega-6 fatty acids or high levels of high-fat fish oil (HFFO) rich in omega-3 fatty acids; the remaining animals in experimental and control groups were continued on the low-fat corn oil diet until termination of the experiment. Groups of animals were sacrificed 1, 12, or 36 weeks after the last AOM or saline injection, and their colonic mucosa and grossly visible colon tumors from rats sacrificed 36 weeks after the last AOM injection were analyzed for the levels of expression of ras-p21, We found that AOM induced increasingly higher levels of ras-p21 expression with advancing stages of colon tumor development. The HFCO diet resulted in enhanced expression of AOM-induced ras-p21 as observed 36 weeks after the last AOM injection. In contrast, feeding the HFFO diet inhibited AOM-induced ras-p21 expression, These results correlate with increased incidence and multiplicity of grossly visible colon tumors in AOM-treated animals fed a HFCO diet versus decreased incidence and Lower multiplicity of colon tumors in their counterparts on the HFFO diet, Further analysis of ras-p21 levels in cytosol and plasma membrane revealed that feeding a HFFO diet resulted in increasing accumulation of ras-p21 in cytoplasm with a concomitant decrease in membrane-bound ras-p21 levels as observed in animals sacrificed 12 and 36 weeks after the last AOM injection, Thus, the dietary HFCO may promote colon tumorigenesis by increasing ras-p21 expression, whereas HFFO appears to exert its antitumor activity by interfering with posttranslational modification and membrane localization of ras-p21.

L15 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:450928 CAPLUS Full-text
DOCUMENT NUMBER: 125:163224
TITLE: Protein farnesyltransferase in plants
AUTHOR(S): Skoczylas, E.; Swiezewska, E.
CORPORATE SOURCE: Inst. Biochem., Biophysics, Polish Acad. Sci., Warsaw, 02-106, Pol.
SOURCE: Biochimie (1996), 78(2), 139-143
CODEN: BICMBE; ISSN: 0300-9084
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The occurrence of protein farnesyltransferase has been demonstrated in spinach. The enzyme transferred different prenyl groups to the nonapeptide acceptor. All-trans isoprenoid diphosphates were utilized more efficiently than long-chain mainly cis-polyprenyl diphosphates and dolichyl diphosphates. The activity of the enzyme was stimulated by divalent cations. The presence of protein farnesyltransferase activity in several plant species has been confirmed.

L15 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:113461 CAPLUS Full-text
DOCUMENT NUMBER: 124:156052

TITLE: Anticancer compositions containing 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitor and protein farnesyl transferase inhibitor with enhanced activity
INVENTOR(S): Kawada, Sumio; Matsuzawa, Juji
PATENT ASSIGNEE(S): Sankyo Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07316076	A2	19951205	JP 1994-109355	19940524
PRIORITY APPLN. INFO.:			JP 1994-109355	19940524

OTHER SOURCE(S): MARPAT 124:156052

AB Anticancer compns. containing 3-hydroxy-3-methylglutaryl CoA reductase inhibitor (e.g. Na pravastin) and protein farnesyl transferase inhibitor (e.g. d-limonene) showed enhanced activity as determined in e.g. HepG2 cancer cell cultures. Capsules were formulated containing pravastin 10, limonene 100, lactose 100, corn starch 148.8 and sodium stearate 1.2 mg.

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